



## United States Department of the Interior

### FISH AND WILDLIFE SERVICE

Idaho State Office, Ecological Services  
4696 Overland Road, Room 576  
Boise, Idaho 83705

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March 30, 1994

Mr. Bert Doughty  
Supervisor, Environmental Affairs  
Cyprus Thompson Creek Mining Company  
P.O. Box 62  
Clayton, ID 83227

Subject: Review of Draft Biological Assessment for Cyprus Thompson  
Creek Mine NPDES Permits (File # 600.0600F, 1050.5102,  
1-4-94-I-38)

Dear Mr. Doughty,

The U.S. Fish and Wildlife Service (Service) has reviewed the Draft Biological Evaluation (BE) for reissuance of existing National Pollutant Discharge Elimination System (NPDES) permits and issuance of new NPDES permits for the Cyprus-Thompson Creek Mine (Mine). We understand that all five discharges will be in tributaries to, or directly into the Salmon River. We appreciate you providing the Service with a draft BE addressing the potential effects of NPDES discharges on candidate and listed species. If you have not already done so, we recommend that a draft and/or final BE also be sent to the National Marine Fisheries Service (NMFS) for review regarding chinook and sockeye salmon.

Document pages 27 and 28 were missing from our copy; Service comments may reflect their absence. The following comments are provided for your consideration.

#### General Comments

The potential effects of the Mine Plan of Operations modifications and regulated discharges should be addressed cumulatively and not as mutually exclusive issues. As these permits are inter-related the Service recommends a joint effort by the U.S. Forest Service (USFS), Bureau of Land Management (BLM), and Environmental Protection Agency (EPA) in review of measures proposed to deal with the potential acid mine drainage at the mine. One BE should be prepared for the whole project. This would benefit all parties concerned by expediting the review process and avoiding conflicting recommendations.

Candidate species have no protection under the Endangered Species Act (ESA), but could be formally proposed and listed during project

planning, thereby falling within the scope of Section 7 of the ESA. Although bull trout is a candidate species it is appropriate for you to consider the potential effects of the modification to the Mine Plan and of the current and proposed discharges. Currently, state and federal agencies are developing a conservation strategy for bull trout. Through this process key watersheds have been identified for protection from further habitat loss or modification. The Thompson and Squaw Creek drainages fall within this proposed strategy area, and an agreement may be signed before project completion. A decision by the Service as to whether bull trout should be listed under the Act is imminent.

Although the proposed modifications and subsequential discharges may not physically affect bull trout habitat, loss of use of this habitat may occur due to changes in water quality and should be addressed.

Potential impacts to the Salmon River should be included in all sections of the BE as discharges will ultimately be entering this waterbody. A seasonal characterization of water quality and quantity, and status of candidate and listed species, and an assessment of the potential for effects should also be included. Any monitoring data collected from upstream and downstream of the mine site should be also be provided.

No mention of any proposed treatment(s) of discharges was provided in the BE. If an acid producing potential does exist (as stated), a section discussing measures which will be taken to address the potential for acid mine drainage and the long-term monitoring of the effectiveness of these treatments should be provided in detail within the BE.

### Specific Comments

Sections 2.4.1, and 2.4.2: There is not enough information provided within this section to support the conclusions. Sample data which was collected should be provided (in an appendix) to assist in assessing the aquatic invertebrates and fish population(s) trends discussed. Sample locations designated on a map would also be very useful. Were these sample locations repeated every year? Did surveys for bull trout coincide with seasonal use by this species? Timing of these surveys could affect your results for population and age class distribution numbers. This section should be expanded to provide more data to maintain your conclusions.

Section 3.1: Discharges 001-004 identified on Figure 4 are shown to be entering Buckskin, Pat Hughes, and Bruno Creeks. Descriptions of these habitats, resident fish and invertebrate populations, and sampling summaries should be included for these creeks. Also, an analysis of the effects of these discharges on these creeks should be provided.



Section 3.2.2 Discussion of spawning habitats should include bull trout or be clarified as to what species is being addressed.

Section 3.2.4: Water quality monitoring data (seasonal flows, pH, alkalinity, hardness, metals) should be included for Buckskin, Pat Hughes, and Bruno Creeks. In addition, for all creeks (including Thompson and Squaw) more complete water quality and quantity monitoring data (perhaps in an appendix) would be valuable. This would assist the Service in determining if variations occur as a result of natural processes or human activities, and the potential for cumulative impacts to occur from the proposed discharges.

As previously stated, water quality measurements which have been taken in the Salmon River should be included within this section as all five discharges will be entering it. Seasonal flow changes should also be included in order to evaluate the potential dilution capability.

Section 4.1.2: Further discussion is needed regarding proposed discharge 004, which would occur only during periods of high flow (i.e. snowmelt). The potential influx of sediment and metals into Squaw Creek drainage during this period should be addressed. Additionally, is the projected period of high flow for a "normal" snow year? Since Idaho has been in a drought situation for several years further assessment of the loading potential into Bruno Creek for years of above or below normal precipitation should be completed to assess impacts. Would this discharge be used during heavy rain events in the summer as well? What are the projected flows? Will the Squaw Creek drainage be able to accommodate these high flows?

Information should be provided about the operation and maintenance schedule and long-term monitoring of discharge 005. This information should be included for all proposed discharges. The Service would be opposed to any discharge which would remain with mine shut-down or closure.

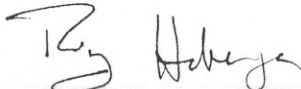
Section 4.2: Data which has indicated the "potential for acid rock drainage" should be included. Are there areas on site which are currently producing acid drainage? What methods are currently being implemented or proposed to treat these effluents? Will the open pit discussed in this section be filled with "clean" rock to prevent becoming a hazard to wildlife?

Section 4.3.1: Although it appears that Squaw Creek does not hold a "significant population" of bull trout, the EPA has an obligation to protect the species from further decline and to make decisions which promote recovery. Any action which may contribute to the decline of their population or habitat may contribute to pushing the species closer to listing and further away from recovery.

The Service appreciates having the opportunity to review the draft BE for the reissuance and proposed NPDES permits for the Cyprus Thompson Creek Mine. We look forward to commenting on a final BE

which encompasses all aspects of the operation. Further, we will continue to participate in the NEPA analysis for the project. If you have any questions please contact Susan Burch of my staff at 208-334-1931.

Sincerely,

*For* 

Charles H. Lobdell  
State Supervisor, Ecological Services

cc: FWS-ES, Portland (Steffeck)  
USFS, Challis (Greg Johnson)  
BLM, Salmon (Mark Johnson)  
EPA, Boise  
EPA, Seattle (Chamberlain)  
IDFG, Salmon  
IDFG, Boise  
IDHW-DEQ, Boise (Schuld)  
NMFS, Seattle (Tuttle)  
FWS-LE, Boise